

## ABSTRACT

5 A shaper 201 and a scheduler 203 are combined to determine a target tree 203 and insert 207 a tag into a data structure, wherein the tag is associated with a packet that has reached the head of line (HOL) of a queue in a packet router. A tag may become an eligible tag and be placed in a set of tags to be searched. Such tags are searched for the smallest tag. A packet associated with the smallest tag is transmitted if the output link is available.